

ABSTRACT

A magnetic metal powder having fluidity is provided which is composed of FePt nanoparticles synthesized by the polyol synthesis method that possess fct (face-centered tetragonal) structure and exhibit crystal magnetic anisotropy from immediately after synthesis. Specifically, there is provided a magnetic metal powder having fluidity which is composed of magnetic metal particles whose main components and the contents thereof are represented by the following general formula (1):



where T is one or both of Fe and Co, M is one or both of Pt and Pd, Z is at least one member selected from the group composed of Ag, Cu, Bi, Sb, Pb and Sn, X represents 0.3 ~ 0.7, and Y represents 0.7 ~ 1.0, the balance being impurities unavoidably incorporated during production, which magnetic metal powder has a volumetric ratio of ferromagnetic structure (face-centered tetragonal ratio) as measured by Mossbauer spectroscopy in the range of 10 ~ 100%, saturation magnetization σ_s of 20 emu/g or greater, and average primary particle diameter by transmission electron microscopic observation (TEM) of 30 nm or less.